US DEPARTMENT OF AGRICULTURE
FOREST SERVICE

5220

Northeastern Area State & Private Forestry

DIVISION OF FOREST PEST CONTROL

Report No. S-69-18 September, 1969

OAK DEFOLIATION BY THE ELM SPANWORM
WASHBURN R.D., CHEQUAMEGON N.F.

By Glen Erickson and Imants Millers

INTRODUCTION

Defoliation was first observed in 1968, but it was too late to determine the culprit. In 1969, the District reported again that defoliation was in progress. The larvae are half the size of the elm spanworm, Ennomos subisgnarius (Hbn.), but the morphological characteristics match. The adults compare favorably with southern elm spanworm specimens.

METHODS

Ground examinations were made before aerial survey. During July, larvae were collected and reared for identification. Degree of defoliation was estimated at several locations. An aerial survey was made in early August, to delineate the outbreak boundaries. The Forest Service Aero-commander was flown north-south lines, 3 miles apart, at 1000 ft. above ground and 100 mph. Heavy to severe defoliation (more than 50%) was mapped, lighter defoliation was determined from ground checks.

RESULTS

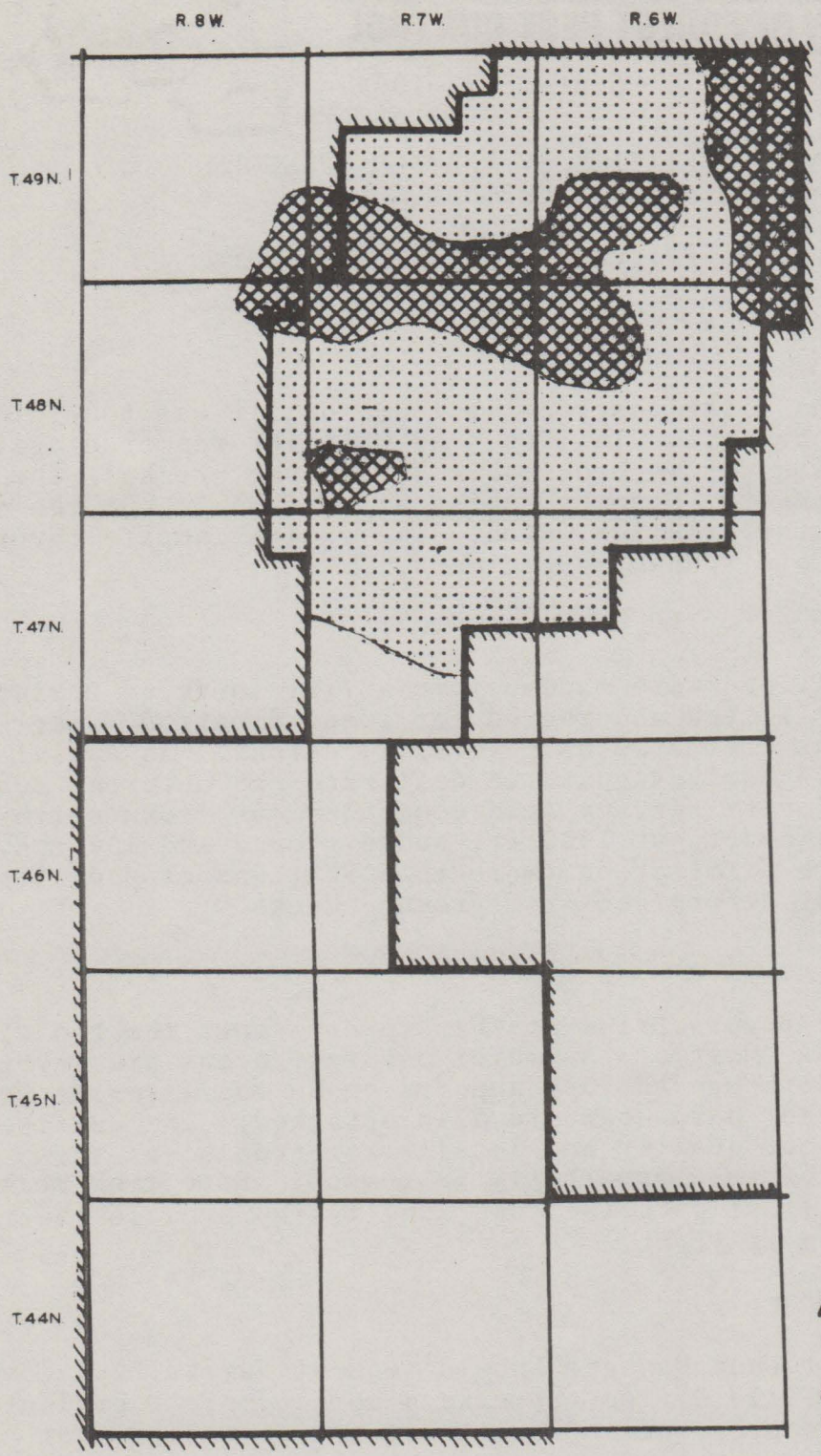
The map on the reverse side of this report shows the two classes of defoliation. Most of the major oak type areas are severely defoliated. Although the oak appears to be the favorite host, most of the other hardwoods are also attacked. The oak is generally of poor quality and locally referred to as scrub oak. Repeated frost damage apparently is common. Some tree mortality is evident in frost pockets. Oak quality improves southward, but the defoliation is light.

RECOMMENDATION

The Forest Land Manager should request Forest Pest Control, St. Paul Field Office, to make a more complete evaluation, if the resource values threatened are of economic or aesthetic value.

CHEQUAMEGON NATIONAL FOREST North

WISCONSIN



SCALE

0 1 2 3 4 5 6 Miles

LEGEND

National Forest Boundary

ELM SPANWORM DEFOLIATION- 1969

Light to Moderate

Heavy to Severe

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